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Patent  
Case No.: 58460US002

32692

Customer Number

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

First Named Inventor: VERNSTROM, GEORGE D.

Application No.: 10/674594

Group Art Unit: 1754

Filed: September 29, 2003

Examiner: Thomas H. Parsons

Title: FUEL CELL CATHODE CATALYST

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on:

June 1, 2004  
Date

Phyllis J. Boettcher  
Signed by: Phyllis J. Boettcher

Dear Sir:

Pursuant to 37 CFR §§ 1.56, 1.97, and 1.98, enclosed is a completed Form PTO-1449, citing references submitted for consideration by the Examiner. Copies of any cited foreign patents, non-patent literature, and unpublished US application documents are enclosed. Pursuant to the waiver in the Pre-OG Notice, dated July 11, 2003, copies of US patents and published US patent applications are no longer required and are not enclosed. It is respectfully requested that the Examiner initial and return the enclosed Form PTO-1449 to indicate that each reference has been considered.

It is believed that no fee is due; however, in the event a fee is required, please charge the fee to Deposit Account No. 13-3723.

If a first Office Action on the merits has been mailed prior to the mailing date of this document, please charge the fee for consideration of an Information Disclosure Statement set forth in 37 CFR § 1.17(p), and if necessary, please charge any additional fees, or credit any overpayment to Deposit Account No. 13-3723.

Date

6/1/04

Respectfully submitted,

By

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Office of Intellectual Property Counsel  
3M Innovative Properties Company  
Facsimile No.: 651-736-3833

<b>Substitute for form 1449A/PTO (modified)</b>  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary) JUN 04 2004 PATENT & TRADEMARK OFFICE	<b>Application Number</b>	<b>10/674594</b>
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	<b>Attorney Case Number</b>	<b>58460US002</b>

Page 1 of 3

U.S. Patent Documents					
Exam. Init.*	Cite No.	Document Number	Publication Date or Issue Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Doc. Number-(Kind Code if Known)			
	A1	US- 3,969,545	07/13/1976	Slocum	
	A2	US- 4,148,294	04/10/1979	Scherber et al.	
	A3	US- 4,155,781	05/22/1979	Diepers	
	A4	US- 4,209,008	06/24/1980	Lemkey et al.	
	A5	US- 4,252,865	02/24/1981	Gilbert et al.	
	A6	US- 4,252,843	02/24/1981	Dorer et al.	
	A7	US- 4,340,276	07/20/1982	Maffitt, et al.	
	A8	US- 4,396,643	08/02/1983	Kuehn et al.	
	A9	US- 4,568,598	02/04/1986	Bilkadi et al.	
	A10	US- 4,812,352	03/14/1989	Debe	
	A11	US- 4,985,386	01/15/1991	Tsurumi et al.	
	A12	US- 5,039,561	08/13/1991	Debe	
	A13	US- 5,079,107	01/07/1992	Jalan	
	A14	US- 5,138,220	08/11/1992	Kirkpatrick	
	A15	US- 5,176,786	01/05/1993	Debe	
	A16	US- 5,336,558	08/09/1994	Debe	
	A17	US- 5,338,430	08/16/1994	Parsonage et al.	
	A18	US- 5,593,934	01/14/1997	Stonehart	
	A19	US- 5,763,363	06/09/1998	Schulz et al.	
	A20	US- 5,872,074	02/16,1999	Schulz et al.	
	A21	US- 5,879,827	03/09/1999	Debe et al.	
	A22	US- 5,879,828	03/09/1999	Debe et al.	
	A23	US- 6,040,077	03/21/2000	Debe et al.	
	A24	US- 6,051,046	04/18/2000	Schulz et al.	
	A25	US- 6,136,412	10/24/2000	Spiewak et al.	
	A26	US- 6,183,668 B1	02/06/2001	Debe et al.	
	A27	US- 6,277,170 B1	08/21/2001	Schulz et al.	
	A28	US- 6,319,293 B1	11/20/2001	Debe et al.	

<b>*Examiner:</b>	<b>Date Considered:</b>
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

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		Doc. Number-(Kind Code if Known)			
	A29	US- 6,465,041 B1	10/15/2002	Frisk et al.	
	A30	US- 6,703,068 B2	03/09/2004	Hintzer et al.	
	A31	US- 2001/0031338 A1	10/18/2001	Han	
	A32	US- 2002/0004453 A1	01/10/2002	Haugen et al.	
	A33	US- 2003/0134178 A1	07/17/2003	Larson	

Foreign Patent Documents							
Exam. Init.*	Cite No.	Foreign Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	Translation (Check if yes)
		Ctry. Code	Number-Kind Code (if known)				
	B1	WO	96/23906	08/08/1996			
	B2	EP	0 671 357 A1, B1 (Abstract)	09/13/1995			
	B3						
	B4						
	B5						
	B6						
	B7						

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS		
Exam. Init.*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published
	C1	N. M. Markovic, T. J. Schmidt, V. Stamenkovic, and P. N. Ross, "Oxygen Reduction Reaction on Pt and Pt Bimetallic Surfaces: A Selective Review", Fuel Cells 2001, Vol. 1, No. 2., pp. 105 – 116.
	C2	U. A. Paulus, A. Wokaun, and G. G. Scherer, T. J. Schmidt, V. Stamenkovic, V. Radmilovic, N. M. Markovic, and P. N. Ross; "Oxygen Reduction on Carbon-Supported Pt – Ni and Pt – Co Alloy Catalysts", J. Phys. Chem. B, April 25, 2002, Vol. 106, No. 106, pp. 4181 – 4191.
	C3	J. McBreen and S. Mukerjee: "In Situ X-Ray Absorption Studies of Carbon Supported Pt and Pt Alloy Nanoparticles" in A. Wieckowski ed.: <i>Interfacial Electrochemistry</i> , M. Dekker, 1999, pp. 895 – 914.
	C4	M. Watanabe, H. Uchida, Y. Matsuura; "Experimental Analysis: The Role Of The Electronic Structure Change By Pt-Alloying In The Fuel Cell Reactions", Keynote Lecture at 4 <sup>th</sup> International Conference on Electrocatalysis, Clean Energy Research Center, Yamanashi University, Takeda 4, Kofu 400-8510, Japan, September 23-25, 2002, Como, Italy (Abstract) K16.

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	<b>Attorney Case Number</b>	<b>58460US002</b>

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS		
Exam. Init.*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published
	C5	G.M. Chow, W.B. Stockton, R. Price, S. Baral, A.C. Ting, B.R. Ratna, P.E. Shoen, and J.M. Schnur, G.L. Bergeron, M.A. Czarnaski, J.J. Hickman, and D. A. Kirkpatrick; <i>"Fabrication Of Biologically Based Microstructure Composites For Vacuum Field Emission"</i> ; Materials Science and Engineering, A158, (1992), pp. 1 – 6.
	C6	K. K. Kam, M. K. Debe, R. J. Poirier, and A. R. Drube; <i>"Summary Abstract: Dramatic Variation Of The Physical Microstructure Of A Vapor Deposited Organic Thin Film"</i> , J. Vac. Sci. Technol A, 5, (4), July/August, 1987, pp. 1914 – 1916.
	C7	J. A. Floro, S. M. Rossnagel, and R. S. Robinson; <i>"Ion-bombardment-induced Whisker Formation On Graphite"</i> , J. Vac. Sci. Technol A, 1, (3), July/September, 1983, pp. 1398 – 1402.
	C8	M. K. Debe, K. K. Kam, J. C. Liu, and R. J. Poirier, <i>"Vacuum Vapor Deposited Thin Films Of A Perylene Dicarboximide Derivative; Microstructure Versus Deposition Parameters"</i> , J. Vac. Sci. Technol A, 6, (3), May/Jun, 1988, pp. 1907 – 1911.
	C9	M. K. Debe and R. J. Poirier; <i>"Effect of Gravity On Copper Phthalocyanine Thin Films III: Microstructure Comparisons Of Copper Phthalocyanine Thin Films Grown In Microgravity And Unit Gravity"</i> , Thin Solid Films 186, 1990, pp. 327 – 347.
	C10	Y. Sadaoka, T. A. Jones, G. S. Revell, and W. Gopel; <i>"Effects Of Morphology On NO<sub>2</sub> Detection In Air At Room Temperature With Phthalocyanine Thin Films"</i> , J. Mat. Sci. 25, 1990, pp. 5257 – 5268.
	C11	Rapidly Quenched Metals, Proc of the Fifth Int. Conf on Rapidly Quenched Metals, Wurzburg, Germany, Sept 3 – 7, 1984, S. Steeb et al., eds., Elsevier Science Publishers B.V., New York, 1985, pp. 1117 – 1124.
	C12	P. K. Lee and M. K. Debe; <i>"Measurement and Modeling of the Reflectance-Reducing Properties of Gradient Index Microstructured Surfaces"</i> , Photographic Science and Engineering, Vol. 24, (4), July/August, 1980, pp. 211 – 216.
	C13	K. Robbie, L. J. Friedrich, S. K. Dew, J. Smy and M. J. Brett; <i>Fabrication Of Thin Films With Highly Porous Microstructures</i> , J. Vac. Sci. Technol. A 13(3), May/Jun, 1995, pp. 1032 – 1035.
	C14	K. Robbie, M. J. Brett and A. Lakhtokia; <i>First Thin Film Realization Of A Helicoidal Bianisotropic Medium</i> , J. Vac. Sci. Technol. A 13(6), Nov/Dec, 1995, pp. 2991 – 2993.
	C15	

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